[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-3993; Directorate Identifier 2015-NM-065-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A300 series airplanes; Model A300 B4-600, B4-600R, F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes); and Model A310 series airplanes. This proposed AD was prompted by reports of partial loss of no-back brake (NBB) efficiency on the trimmable horizontal stabilizer actuator (THSA). This proposed AD would require an inspection to determine THSA part number, serial numbers, and flight cycles on certain THSAs; and repetitive replacement for certain THSAs. We are proposing this AD to prevent loss of THSA NBB efficiency, which in conjunction with the power gear not able to keep the ball screw in its last commanded position, could lead to an uncommanded movement of the horizontal stabilizer, possibly resulting in loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3993; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-3993; Directorate Identifier 2015-NM-065-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2015-0081, dated May 7, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition. The MCAI states:

> During endurance qualification tests on a Trimmable Horizontal Stabilizer Actuator (THSA) concerning another aeroplane type, a partial loss of the noback brake (NBB) efficiency was experienced. Investigation results concluded that this partial loss of braking efficiency in some specific aerodynamic load conditions was due to polishing and auto-contamination of the NBB carbon friction disks.
>
> Due to design similarity on the A300-600, A300-600ST and A310 fleet, the same tests were initiated by the THSA manufacturer on certain type THSA, sampled from the field. Subject tests confirmed that THSA Part Number (P/N) 47142 series, as installed on the A300-600, A300-600ST and A310 fleet, are also affected by this partial loss of NBB efficiency.
>
> This condition, if not detected and corrected, and in conjunction with the power gear not able to keep the ball screw in its last commanded position, could potentially lead to an uncommanded movement of the Horizontal Stabilizer, possibly resulting in loss of control of the aeroplane.
>
> For the reasons described above, this [EASA] AD requires the removal from service of each affected THSA, with the intent of in-shop NBB carbon disk replacement.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3993.

Related Service Information under 1 CFR part 51

Airbus has issued Airbus Service Bulletin A300-27-6070, dated February 17, 2015; and Airbus Service Bulletin A310-27-2106, dated February 17, 2015. This service information describes procedures for inspection and replacement of the THSA.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Explanation of Compliance Times

In most ADs, we adopt a compliance time allowing a specified amount of time after the AD's effective date. In this case, however, EASA has already issued regulations that require operators to replace certain THSAs to address an identified unsafe condition by certain dates, but before exceeding certain flight cycle limits corresponding to each date. To provide for coordinated implementation of EASA's regulations and this proposed AD, we are using the same compliance dates in this proposed AD.

This AD proposes the replacement of the NBB disks at an interval of 14,600 flight cycles to take full benefit of the THSA published life limits. The replacement of the

THSA NBB disks having already accumulated more than 14,600 flight cycles will start with the oldest THSA. A different grace period for NBB disks replacement has been defined depending on the flight cycles accumulated on the THSA NBB disks.

Costs of Compliance

We estimate that this proposed AD affects 152 airplanes of U.S. registry.

We also estimate that it would take about 27 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour. Required parts would cost about $590,000 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $90,028,840, or $592,295 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2016-3993; Directorate Identifier 2015-NM-065-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(6) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.

(2) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.

(3) Airbus Model A300 B4-605R and B4-622R airplanes.

(4) Airbus Model A300 F4-605R and F4-622R airplanes.

(5) Airbus Model A300 C4-605R Variant F airplanes.

(6) Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by reports of partial loss of no-back brake (NBB) efficiency on the trimmable horizontal stabilizer actuator (THSA). We are issuing this AD to prevent loss of THSA NBB efficiency, which in conjunction with the power gear not able to keep the ball screw in its last commanded position, could lead to an uncommanded movement of the horizontal stabilizer, possibly resulting in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Affected THSAs

THSAs affected by the requirements of this AD have part numbers (P/Ns) 47142-403, 47142-413, 47142-414, and 47142-423.

Note 1 to paragraph (g) of this AD: FAA AD 2011-15-08, Amendment 39-16755 (76 FR 42029, July 18, 2011) requires installation of three secondary retention plates for the gimbal bearings on the THSA upper primary attachment, which involved a THSA part number change from the -300 series to the -400 series.

Note 2 to paragraph (g) of this AD: The life limits specified in Part 4 of the airworthiness limitations section are still relevant for the affected THSA. This AD addresses a replacement limit for the NBB disks installed on the THSA, not the life limit for the THSA itself.

(h) Inspection for Affected THSAs, Flight Cycles, and THSA Replacement

Before each date and before exceeding the corresponding THSA flight-cycle limits specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, do the actions specified

in paragraphs (h)(1) and (h)(2) of this AD, and before exceeding the flight cycle limit corresponding to each date as specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, do the actions specified in paragraph (i) of this AD.

(1) Do an inspection of the THSA to determine the part number and serial number.

(2) Do an inspection of the airplane maintenance records to determine the flight cycles accumulated on each affected THSA since first installation on an airplane, or since last NBB replacement, whichever is later. If no maintenance records conclusively identifying the last NBB disk replacement are available, the flight cycles accumulated since first installation of the THSA on an airplane apply.

(i) THSA Replacement

By each date specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, for those affected THSAs having reached or exceeded the corresponding number of flight cycles specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, replace the THSA with a serviceable unit, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-27-6070, dated February 17, 2015; or Airbus Service Bulletin A310-27-2106, dated February 17, 2015, as applicable.

(j) Compliance Dates and THSA Flight Cycle Limits

Paragraphs (j)(1), (j)(2), and (j)(3) of this AD specify compliance dates and THSA flight cycle limits for accomplishing the actions required by paragraphs (h) and (i) of this AD.

(1) As of 30 days after the effective date of this AD: The affected THSA flight-cycle limit is 30,000 flight cycles since first installation of the THSA on an airplane, or since last NBB replacement, whichever is later.

(2) As of February 1, 2017: The affected THSA flight-cycle limit is 20,000 flight cycles since first installation of the THSA on an airplane, or since last NBB replacement, whichever is later.

(3) As of February 1, 2018: The affected THSA flight-cycle limit is 14,600 flight cycles since first installation of the THSA on an airplane, or since last NBB replacement, whichever is later.

(k) Serviceable THSA Definition

For the purpose of this AD, a serviceable THSA is a unit identified in paragraph (k)(1) or (k)(2) of this AD.

(1) A THSA identified in paragraph (g) of this AD that, as of each date specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, has not exceeded the flight cycle limits specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD since first installation of the THSA on an airplane, or since the last NBB disk replacement, whichever is later.

(2) A THSA with a different part number (e.g., a THSA that is not identified in paragraph (g) of this AD) that is not affected by the requirements of this AD.

(l) THSA Replacements

As of each date and before exceeding the flight cycle limit corresponding to each date specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD: Replace each affected THSA with a serviceable unit, in accordance with the Accomplishment Instructions of

Airbus Service Bulletin A300-27-6070, dated February 17, 2015; or Airbus Service Bulletin A310-27-2106, dated February 17, 2015.

(m) Parts Installation Limitation

Before each date specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, an operator may install an affected THSA on an airplane, provided that the unit has not exceeded the corresponding number of flight cycles specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD, since first installation on an airplane, or since last NBB replacement, whichever occurred later.

(n) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2015-0081, dated May 7, 2015, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3993.

(2) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 24, 2016.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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